



V-ATPase B1 Monoclonal Antibody

Catalog No	YP-mAb-16511
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	ATP6V1B1
Immunogen	The antiserum was produced against synthesized peptide derived from human ATP6V1B1. AA range:381-430
Specificity	V-ATPase B1 Monoclonal Antibody detects endogenous levels of V-ATPase B1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ATP6A1;ATP6V1A1;EC:7.1.2.2;VA68;V-ATPase 69 kDa subunit;V-ATPase B1; ATP6V1B1;V-type proton ATPase subunit B kidney isoform;ATP6B1;VATB; VPP3;V-type proton ATPase subunit B;kidney isoform;V-ATPase subunit B 1; Endomembrane proton pump 58 kDa subunit;Vacuolar proton pump subunit B 1
Observed Band	60kD
Calculated Molecular Weight	60kD
Cell Pathway	Apical cell membrane . Basolateral cell membrane .
Tissue Specificity	Kidney; localizes to early distal nephron, encompassing thick ascending limbs and distal convoluted tubules (at protein level) (PubMed:29993276, PubMed:16769747). Expressed in the cochlea and endolymphatic sac (PubMed:9916796).
Function	disease:Defects in ATP6V1B1 are the cause of distal renal tubular acidosis with deafness (dRTA) [MIM:267300]. Inheritance is autosomal recessive. Patients with recessive dRTA are severely affected, presenting with either acute illness or growth failure at a young age, and bilateral sensorineural deafness. Other features include low serum K(+) due to renal potassium wasting, and elevated urinary calcium. If untreated, this acidosis may result in dissolution of bone,



leading to osteomalacia and rickets. Renal deposition of calcium salts (nephrocalcinosis) and renal stone formation commonly occur.,domain:The PDZ-binding motif mediates interactions with SLC9A3R1 and SCL4A7.,function:Non-catalytic subunit of the peripheral V1 complex of vacuolar ATPase. V-ATPase is responsible for acidifying a variety of intracellular compartments in eukaryotic cells.,similarity:Belongs to the ATPase alpha/be

Background

This gene encodes a component of vacuolar ATPase (V-ATPase), a multisubunit enzyme that mediates acidification of eukaryotic intracellular organelles. V-ATPase dependent organelle acidification is necessary for such intracellular processes as protein sorting, zymogen activation, receptor-mediated endocytosis, and synaptic vesicle proton gradient generation. V-ATPase is composed of a cytosolic V1 domain and a transmembrane V0 domain. The V1 domain consists of three A and three B subunits, two G subunits plus the C, D, E, F, and H subunits. The V1 domain contains the ATP catalytic site. The V0 domain consists of five different subunits: a, c, c', c'', and d. Additional isoforms of many of the V1 and V0 subunit proteins are encoded by multiple genes or alternatively spliced transcript variants. This encoded protein is one of two V1 domain B subunit isoforms and is found i

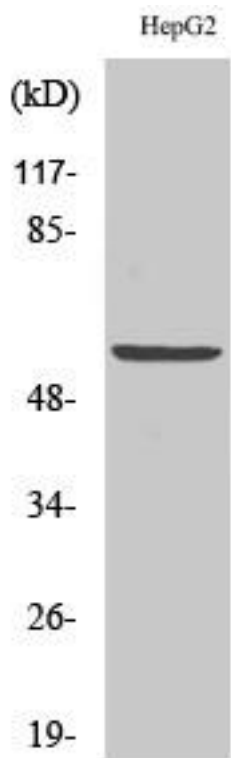
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using V-ATPase B1 Monoclonal Antibody